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# FACSIMILE COVERSHEET



EPA Region 5 Records Ctr.

1360 N. Wood Dale Road Suite A Wood Dale, Illinois 60191 Phone: 630.616.2166

638.616.9203

SENT BY:

# Recipient Information

# **Sender Information**

To Tom Alcamo	SENT BY:	M. DeRosa
COMPANY: U.S.EPA	ENTACT:	Chicago
FAX#: (312) 886-4071	DATE:	•
# OF PAGES INCLUDING THIS SHEET:		
COMMENTS:		
•		

IF PAX IS NOT RECEIVED IN ITS ENTIRETY, PLEASE NOTIFY ENTACT AT THE ABOVE TELEPHONE NUMBER. THANK YOU.

Ross Analytical Services, Inc. 16433 Foltz Industrial Farkway • Strongsville, Obio 44136 (216) 572-3200 • Fax (216) 572-7620 • 1-800-325-7737

# 6

#### CERTIFICATE OF ANALYSIS

Client:

ENTACT

2850 W. 3rd Street Cleveland, OH 44113

Attn: Shape Banks

Purchase Order: C157

Work Order #: 97-10-137 Client Code: ENTACT

Report Date: 10/21/97
Work ID: Soil for Metals/TRDE/Pests.

Date Received: 10/17/97

#### SAMPLE IDENTIFICATION

Lab Sample Lab Sample

Number Description Number Description

01 BF-002

Enclosed are the analytical results for the samples listed above. Analyses were performed by the methods referenced in the Test Methodologies section, while any special circumstances are described in the Report Comments section. Unless otherwise noted, sample results are not moisture-corrected. Most analytes are reported relative to an Estimated Quantitation Limit (EQL), which is the lowest concentration that can be reliably measured under routine laboratory conditions. Questions or comments concerning the enclosed results should be directed to your Client Services Representative.

Certificate approved by

Carol L. Turner

Work Order # 97-10-137 Rose Analytical Services, Inc

Reported: 10/21/97

#### REPORT COMMENTS

All pesticides target results are reported even if below the EQL. Results below the KQL are flagged with a "J" and are considered estimated values.

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Ross Analytical Services, Inc

Reported: 10/21/97

#### TEST METHODOLOGIES

pH in solids and non-aqueous liquids was determined electrometrically following slurrying with water as in EPA Method 9045C.

Organochlorine pesticides and PCB's were determined using gas chromatography with electron capture detection as in EPA Method 8081.

Metals were determined in solid and non-aqueous liquid samples by digestion with nitric acid, hydrogen peroxide, and hydrochloric acid as in EPA Method 3050A, followed by Inductively Coupled Plasma Emission Spectroscopy as in EPA Method 6010A, unless noted otherwise.

Mercury was determined in solid and non-aqueous liquid samples by cold vapor atomic absorption after acid/permanganate digestion as in EPA Methods 245.5 and 7471A. A single analysis was performed unless otherwise noted.

Total petroleum hydrocarbons were determined by infrared spectroscopy following extraction with Freon-113 as in EPA Method 418.1. Solids were Soxhlet extracted as in EPA Method 9071.

Solid and semisolid samples extracted for organochlorine pesticides and PCB's in an ultrasonic extractor using methylene chloride and acetone as in EPA Method 3550A.

Work Order # 97-10-137

Reported: 10/21/97

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BF-002	
Sample Description:	

Unite BOL			mg/Kg 0.49					
Result Units 7.88 Standard units		22.0	TÖS	3.40	11.3	<bql< th=""><th>-10a&gt;</th><th>&lt; BOL</th></bql<>	-10a>	< BOL
Analyte Description pr by EPA 9045C	ic by ICP	a by ICP	m by ICP	um by ICP	के प्रकृ	tum by ICP	r by ICP	CV by CVBB

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Work Order # 97-10-137 Koss Analytical Services, Inc.

Reported: 10/21/97

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Sample Description BF-992

Lab Mo. 01

Test Description TEPE by EDA 418.1

Test Code MCDR

Date Run 10/18/97 Dilution Factor 1 Units ng/Kg

Compound

Result EOL

Petroleum hydrocarbons <u>cEOL</u> 30

## ANALYTICAL RESULTS

Client Sample ID..... BF 002 Data Type ..... SAMPLE

Surrogate And CAS Number	a <b>lytes</b> Analyte	% Recovery	Flags	Recovery Lower -		
877-09-8 2051-24-3	Tetrachloro-m-xylene Decachlorobiphenyl	92 <b>%</b> 92 <b>%</b>		10 - 10 -		SURROGATE SURROGATE
Target Analy CAS Number	tes Analyte	Results (ug/Kg)	Flags		EQL	
11104-28-2 319-84-6 11141-16-5 12674-11-2 58-89-9	Aroclor-1221 alpha-BHC Aroclor-1232 Aroclor-1016 gamma-BHC (Lindane)	< EQL < EQL < EQL < EQL			67.0 1.70 33.0 33.0 1.70	
319-85-7 76-44-8 53469-21-9 319-86-8 309-00-2	beta-BHC Heptachlor Aroclor-1242 delta-BHC Aldrin	1.10 < EQL < EQL < EQL < EQL	Ĵ		1.70 1.70 33.0 1.70 1.70	
12672-29-6 1024-57-3 5103-74-2 5103-71-9 959-98-8	Aroclor-1248 Heptachlor epoxide gamma-Chlordane alpha-Chlordane Endosulfan I	< EQL < EQL < EQL < EQL < EQL			33.0 1.70 1.70 1.70 1.70	
72-55-9 60-57-1 11097-69-1 72-20-8 8001-35-2	4,4'-DDE Dieldrin Aroclor-1254 Endrin Toxaphene	1.20 < EQL < EQL < EQL		)	3.30 3.30 33.0 3.30 67.0	
72-54-8 33213-65-9 50-29-3 7421-93-4 1031-07-8	4,4'-000 Endosulfan II 4,4'-00T Endrin aldehyde Endosulfan sulfate	1. <b>80</b> < EQL <b>1.80</b> < EQL < EQL		]	3.30 3.30 3.30 3.30 3.30	
11096-82-5 72-43-5 53494-70-5	Aroclor-1260 Methoxychlor Endrin ketone	< EQL < EQL < EQL			33.0 17.0 3.30	

Ross Analytical Services, Inc.

Date Printed: 10/21/97 10:03

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# CHAIN OLUSTODY

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1380 N. Wood Dale Rd. Selte A Wood Dale, Illinols 60191 Ph. 630/616-2100 Fax 630/616-9203

Sampler: Bauli	Job #: C157
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ENTACT Contact: Shane Banks Date: 17/11/87

Tur	naround Ti	me Requeste	d
24 Hour M.>48 Hour	3 Day	Normal	Other

Sample No.	Matrix	Composite or Grab	Description/Remarks	Preservative	Analysis
34-002	soil	grab.	beildill analydical	4°C	ABCDE FGH
74-002	5011	9426		4.0	90:1 pH-
75-202	Seil	1126.		<b>1</b> * c	TPH(Z
51-502	spil	grab		4°(	Perficiace
		300	-		
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<i>\$</i>					
		11			1

Samples Relinquished By: Share D. Rel 10/17/197	ANALYSIS
Samples Received By: Bel At 19/1/52	A= Total Pb Fa Total Ay
Date	B= Total (d) G= Total St
Samples Relinquished By:	C= Total Ar H= Total Ba
Samples Received By:	D= 704;   (V )= Total Potus Frum Mudrocay forus
Samples Relinquished By:	E= Total fly J= Posticitor
Condition of Sample Upon Receipt:	Olginal - To Customar w/ Final Report

# ROSS ANALYTICAL SERVICES, INC.

## SAMPLE RECEIPT REPORT

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FHLE

SHIPPING CONTAINER: (Circle) Ross Client Date Returned	VORKORDER # <u>97-10-137</u>	
SHIPPING DOCUMENTATION PRESENT? TRACKING NUMBER  SHIPPING CONTAINER INTACT?  SHIPPING CONTAINER INTACT?  CUSTODY SEALS PRESENT? CUSTODY SEALS INTACT? Where? Cooler/Bottles Seal Nos.  SAMPLE TEMPERATURE  AQUEOUS SAMPLES FOR METALS, pH < 2?  AQUEOUS SAMPLES FOR WET TESTS, pH < 2?  AQUEOUS SAMPLES FOR CYANIDE, pH > 12?  AQUEOUS SAMPLES FOR VOA'S PRESERVED WITH HCP. YES/NO/NA SPECIFY:  SAMPLES INTACT?  YES/NO/NA (If no, explain below)  SHIPPING CONTAINER: (Circle)  Ross  Client Date Returned	RECEIVED BY: MT DATE/TIME: /	0/17/97 LOGEN DATE (150)
TRACKING NUMBER  SHIPPING CONTAINER INTACT?  SHIPPING CONTAINER INTACT?  CUSTODY SEALS PRESENT?  CUSTODY SEALS INTACT?  Where? Cooler/Bottles  Seal Nos.  SAMPLE TEMPERATURE  AQUEOUS SAMPLES FOR METALS, pH < 2?  AQUEOUS SAMPLES FOR WET TESTS, pH < 2?  AQUEOUS SAMPLES FOR CYANIDE, pH > 12?  AQUEOUS SAMPLES FOR VOA'S PRESERVED WITH HC!? YES/NO/NA  AQUEOUS SAMPLES FOR VOA'S PRESERVED WITH HC!? YES/NO/NA SPECIFY:  SAMPLES INTACT?  YES/NO/NA (If no, explain below Date Returned)	SAMPLES ARRIVED BY(Circle One) Fed-Ex L	IPS Other(specify) Courier
CUSTODY SEALS PRESENT?  CUSTODY SEALS INTACT?  Where? Cooler/Bottles Seal Nos.  SAMPLE TEMPERATURE  AQUEOUS SAMPLES FOR METALS, pH < 2?  AQUEOUS SAMPLES FOR WET TESTS, pH < 2?  AQUEOUS SAMPLES FOR CYANIDE, pH > 12?  AQUEOUS SAMPLES FOR VOA'S PRESERVED WITH HCI? YES/NO/NA  AQUEOUS SAMPLES FOR VOA'S PRESERVED WITH HCI? YES/NO/NA SPECIFY:  SAMPLES INTACT?  YES/NO/NA (If no, explain belows the pate Returned)		INO MA
CUSTODY SEALS INTACT? Where? Cooler/Bottles Seal Nos.  SAMPLE TEMPERATURE  AQUEOUS SAMPLES FOR METALS, pH < 2?  AQUEOUS SAMPLES FOR WET TESTS, pH < 2?  AQUEOUS SAMPLES FOR CYANIDE, pH > 12?  AQUEOUS SAMPLES FOR CYANIDE, pH > 12?  YES/NO/NA  AQUEOUS SAMPLES FOR VOA'S PRESERVED WITH HCP: YES/NO/NA  OTHER PRESERVATION REQUIREMENTS MET?  YES/NO/NA SPECIFY:  SAMPLES INTACT?  YES/NO/NA (If no, explain below the pate Returned)  SHIPPING CONTAINER: (Circle) Ross Client Date Returned	SHIPPING CONTAINER INTACT?	NO (If no, explain below)
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SAMPLES INTACT?  YES/NO/NA(If no, explain below SHIPPING CONTAINER: (Circle) Ross Client Date Returned	AQUEOUS SAMPLES FOR VOA'S PRESERVED WI	TH HCP YES/NO/IA THE COC DISSESSED PER STEEL P
SHIPPING CONTAINER: (Circle) Ross Client Date Returned	OTHER PRESERVATION REQUIREMENTS MET?	YES/NO/MA SPECIFY:
Date Returned	SAMPLES INTACT?	YES/NO/NA(If no, explain below)
COMMENTS.	COMMENTS:	